



Comment Letters in Response to the 2001 Draft Urban Blueprint

Seattle issued a draft of the Urban Blueprint in June of 2001. The draft was circulated widely and the Salmon Team made numerous presentations of the document to community, business and academic groups. Numerous verbal comments have been incorporated into the current document. In addition we received several formal comment letters which are included here. In some cases the comments were incorporated into this revision of the document. In other cases, the comments went beyond the purpose of the document. When that was so, the comments were referred to the appropriate program manager. We appreciate all who took the time to review the Blueprint and help improve its content.



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*To explore, enjoy
and preserve the
nation's forests,
waters, wildlife
and wilderness.*

December 28, 2001

Ms. Sarah McKearnan
Seattle Public Utilities
10th Floor –Director's Office
710 2nd Avenue
Seattle, WA 98104

Re: Seattle's Urban Blueprint for Habitat Protection and Restoration

On behalf of the Cascade Chapter of the Sierra Club and its Water and Salmon Committee we appreciate the opportunity to comment on the proposed Blueprint. As you may know, Sierra Club has thousands of members in Seattle and approximately 20,000 – 25,000 statewide.

First, Sierra Club wishes to extend our thanks for the process of inclusion that SPU staff have followed in soliciting comments, as well as providing the most recent technical information concerning the habitat needs of the Chinook who depend upon the habitat within the purview of the City of Seattle. Sierra Club believes that the Blueprint is a positive first step to address a difficult and complex issue. This step, however, is one that needs our most careful and deliberate attention, not because there is a Federal law that requires us to do so, but because such efforts are central to how we view ourselves as individuals and as a community. We also believe that the authors have prepared a document that for the most part is clear and concise: that is, "user-friendly" to the general public.

We offer the following comments and observations in the spirit of making a very good Blueprint even better, and one that will provide greater assurance that the City will move on the path of habitat restoration in an expeditious manner.

First, a few "global" comments:

1. On Pages 2-3 the author succinctly states the "research needs." However, the document fails to note for each of the "scientific uncertainties" whether there is ongoing research. The document should also indicate that if there is ongoing research, who is doing it, what is the budget, by when the work will be completed (at least that work defined by the current budget), and whether the anticipated outcome of the work currently underway is expected to provide a final or partial answer. Further, for those "scientific uncertainties" that are not currently under study, identify a reasonable budget at least to initiate the first phase of study; and, alternative sources of funding. The problem for the citizen attempting to understand the document is that there appears to be a complete disconnect in the Blueprint as to the relationship between the list in Addressing Uncertainties, and making final decisions on any of the large array of habitat improvement projects. The public has no idea how the "research needs" will be answered and by when.
2. For each project listed for each Aquatic Environment (excluding the Locks), Sierra Club believes that information must be included in the Blueprint such as what is the length of shoreline affected by each project, what is the total length of shoreline, and therefore what percent of the potential shoreline is improved by each project and all projects in the aggregate.
3. Additionally, Sierra Club believes information on the following topics must be included: How much shallow shoreline is needed? What is the current fry population, what is the Services goal (number of fry needed implied by adult goals), and how much shallow shoreline is needed to meet current and future needs?
4. How much shallow shoreline of suitable quality (or graded in some manner from A to C) currently exists in each Aquatic Environment. Do we know? If so, it ought to be in the Blueprint. If we don't know it should be so stated (we don't seem to find any such statement). Further, it is not known if SPU intends to gather such data if need when considering the list of Data Element Needs on page 87. Is it presumed to occur under the topic of "nearshore bathymetry"? This terminology does not seem inclusive when considering all aspects of nearshore habitat.
5. The proposed projects appear to be a list of "projects of opportunity" rather than perhaps a list of "best projects", as suggested by the fact that with few exceptions the proposed projects are all located on public land.



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6. Should it be determined that woody debris is important, does the City intend to evaluate the potential conflict between placing such material along public shorelines and public use of those shorelines for wading or boating, including safety issues?

Comments on individual pages

1. Page 19b: The subject of exotic plants is raised and is indicated as a possible adverse factor. If the relative role of exotic plants as a negative contributor is satisfactorily understood, why is there not included under "Habitat improvements projects" an element to manage (i.e. get rid of and/or reduce) exotic vegetation. If however the relative significance of exotic vegetation is not understood, why is this topic not included in "Addressing Uncertainties".
2. Page 24d: The possible importance of stream mouths is stated and indicated as an item under Addressing Uncertainties. However, the Blueprint fails to evaluate the potential effect of the City's current program of habitat improvements in its streams. We recommend that the Blueprint (or the ultimate Plan) include a plan to increase invertebrate populations in creeks within the City that are relevant to Chinook (e.g. Taylor Creek).
3. Page 29b: Nothing is mentioned about hardened shorelines: their effect, whether rock has less effect than sheer concrete, how modifications can be done to help fish while not compromising the intent of the hardening as perceived by the property owners. Some inventive thinking and pilot projects with willing property owners seems appropriate.
4. Page 39: Since the shoreline along the Fremont section of the Ship Canal is publicly owned, why are there no projects (or one total project) along either or both sides of the retaining walls. No doubt the complexity of the situation, in particular the effect of wave energy, makes any solution problematic. Nonetheless, given the substantial shoreline length, a feasibility study is in order: perhaps fisheries and hydraulic engineering students at the UW would be willing to provide initial concepts as a class project. The City might also approach the Design Center of the Engineering School at Seattle University. We do not mention the Lakemont Cut given that it is much narrower; but perhaps we are being premature in this exclusion.
5. Page 39: Why nothing on the shoreline of Gas Works Park? Or has the City already concluded that no further improvements are necessary? Seems unlikely since: (1) the Blueprint does not include a summary of current conditions; (2) the City in fact does not know what constitutes "the best shoreline habitat." Is contaminated sediments of concern? If so, why not include the project, but state that no commitment is made until the issue of contaminated sediments is resolved.
6. Arboretum Creek: A project to improve invertebrate populations? We believe but have not confirmed that there is an elementary school in the area which adopted the creek several years ago under the Adopt-a-Creek program with such an objective in mind. If so, enlisting their efforts and other schools in this regard would have multiple benefits.
7. Page 56a: What does the fact that the fraction of Chinook released from Issaquah Hatchery is the highest of those noted (0.87%) suggest about conditions of transit for the fry through the north end of Lake Washington in comparison to fry from the Cedar River.
8. Page 62c: The author lists several studies that have reached conflicting conclusions concerning the effect of over-water structures. Given the normal budgetary constraints and large number of research questions, how does the City propose to reach firm conclusions.

We hope that the above comments are helpful. We are willing to meet with SPU staff should they wish further elaboration and/or clarification of our comments.

Sincerely,

Patricia Sumption, chair
Water and Salmon Committee
Sierra Club, Cascade Chapter



To explore, enjoy
and preserve the
nation's forests,
waters, wildlife
and wilderness.

**CREEKS, DRAINAGE, AND WASTEWATER
CITIZEN ADVISORY COMMITTEE
c/o Cheryl Klinker, Chair
12036 35th Avenue NE
Seattle, WA 98125**

March 19, 2002

Ms. Sarah McKearnan
Seattle Public Utilities
10th Floor - Director's Office
710 2nd Avenue
Seattle, WA 98104

Re: Seattle's Urban Blueprint for Habitat Protection and Restoration

Our Committee has taken significant effort to read, understand, and comment on Seattle's Urban Blueprint for Habitat Protection and Restoration. Chinook Blueprint. We congratulate the City staff on a job-well-done. We believe the Blueprint establishes a reasonable and technically valid strategy for the City in doing its part to enhance habitat conditions for the endangered Chinook. However, we have several comments and suggestions for consideration by City staff that would benefit the Blueprint. The Committee is particularly concerned that the strategy does not include streams located within the City. It does not consider how in-City streams can be improved to either provide suitable habitat or to enhance conditions at the mouths of creeks for passing fry. Our recommendations are provided in separate paragraphs and grouped as "global comments" followed by specific page or subject comments.

"Global" Comments:

1. On Pages 2-3 the authors succinctly state the "research needs". However, the document does not indicate for each of the listed "scientific uncertainties" several items we think will clarify the document. We recommend that the Blueprint identify whether there is ongoing research, and if so, who is doing it, the budget, by when the work will be completed (at least as (that) defined by the current budget), and whether the anticipated outcome of the work currently underway is expected to provide the final or partial answer. Further, for those "scientific uncertainties" that are not currently under study, identify a reasonable budget-- if not to reach a firm conclusion, at least to initiate the first phase of study; and also identify alternative sources of funding. The problem for the citizen attempting to understand the document is that there appears to be a complete disconnect in the Blueprint as to the relationship between addressing the list in "Addressing Uncertainties", and making final decisions on any of the large array of habitat improvement projects. The public has no idea how the "research needs" will be answered and by when. This needs clarification.

2. For each project listed for each Aquatic Environment (excluding the Locks):

-- What is the length of shoreline affected by each project, what is the total length of shoreline, and therefore what percentage of the potential shoreline is improved by each project and all projects in the aggregate.

-- How much shallow shoreline is needed? What is the current fry population, what is the Services goal (number of fry needed that is implied by adult goals), and how much shallow shoreline is needed to meet current and future needs?

-- How much shallow shoreline of suitable quality (or graded in some manner from A to C) currently exists in each Aquatic Environment. Do we know? If so, it ought to be in the Blueprint. If we don't know it should be so stated (we don't seem to find any such statement). Further, it is not known if SPU intends to gather such data if needed when considering the list of Data Element Needs on page 87. Is it presumed to occur under the topic of "nearshore" (bathymetry?). This terminology does not seem inclusive when considering all aspects of nearshore habitat.

3. The proposed projects appear to be a list of "projects of opportunity":

-- This is suggested as, with few exceptions, the proposed projects are located on public land. More appropriate would be a list of "best projects", including sites along private shoreland.

4. If it is determined that woody debris is important:

-- Does the City intend to evaluate the potential conflict between placing such material along public shorelines and public use of those shorelines for wading or boating?

Comments on Individual Pages:

5. Page 19b: the subject of exotic plants is raised and is indicated as a possible adverse factor:

-- If the relative role of exotic plants as a negative contributor is satisfactorily understood, why is there not included under "Habitat Improvements Projects" an element to manage (i.e., get rid of or reduce exotic vegetation. If, however, the relative significance of exotic vegetation is not understood, why is this topic not included in "Addressing Uncertainties".

6. Page 24d: the possible importance of stream mouths is stated :

-- However, the Blueprint does not evaluate the potential effect of the City's current program of habitat improvements in its streams. We recommend that the Blueprint (or the ultimate Plan) include a plan to increase invertebrate populations in creeks within the City that are relevant to Chinook (e.g., Taylor Creek).

7. Page 29b: nothing is mentioned about hardened shorelines:

-- We suggest consideration be given to evaluating their effect: whether rock has less effect than sheer concrete; how modifications can be done to help fish while not compromising the intent of the hardening as perceived by the property owners. Some inventive thinking and pilot projects with willing property owners seems appropriate.

8. Page 39: Since the shoreline along the Fremont section of the Ship Canal is publicly owned:

-- Why are there no projects (or one total project) along either or both sides of the retaining walls. No doubt the complexity of the situation, in particular the effect of wave energy, makes any solution problematic. Nonetheless, given the substantial shoreline length, a feasibility study is in order: perhaps

9. Page 39: Why are there no projects along the shoreline of Gas Works Park:

-- Has the City already concluded that no further improvements are necessary? Seems unlikely since: (1) the Blueprint does not include a summary of current conditions; (2) the City in fact does not know what constitutes "the best shoreline habitat". Is contaminated sediments of concern? If so, why not include the project, but state that no commitment is made until the issue of contaminated sediments is resolved.

10. Page 56a: Chinook fry success:

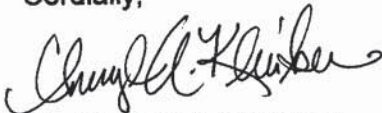
-- Does the higher success of Chinook fry returns (0.87%) released from Issaquah Hatchery suggest anything about conditions of transit through the North end of Lake Washington in comparison to the transit by the less successful fry from the Cedar River?

11. Page 62c: The authors list several studies that have reached conflicting conclusions concerning the effect of overwater structures.

-- Given the normal budgetary constraints and large number of research questions, how does the City propose to reach (a) firm conclusions.

We believe that our comments and suggestions will provide an even stronger, and clearer Blueprint. We hope the Blueprint will be an evolving approach that adapts to discoveries based on assessment of completed projects and new studies. We sincerely thank City staff like Kathryn Lynch who helped provide needed information to us and made excellent presentations to us late last year.

Cordially,



Ms. Cheryl Klinker, Chair

cc: Chuck Clarke, Director S.P.U.

RECEIVED

JUN 12 2002

SEATTLE PUBLIC UTILITIES

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Gordon H. Orians, Professor Emeritus
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June 9, 2002

Honorable Greg Nichols, Mayor
City of Seattle
600 4th Avenue, 12th floor
Seattle, WA 98104-1873

Dear Mayor Nichols,

Recently I participated in a workshop in which varied experts discussed, evaluated, and commented on the Urban Blueprint, an analysis and proposed plan of action for improving the habitat for Chinook salmon in Seattle's water bodies. I believe that all of us were impressed with the quantity and quality of the effort expended by employees of the City of Seattle in their effort to provide a scientific background for the City's restoration and protection actions for salmon. The Blueprint combines the original research carried out by the City with new analyses of the current habitat situation within the City's waters, research needs, and a plan for moving forward. The City of Seattle is fortunate to have in its employ such capable and dedicated scientists.

Salmon are an important cultural icon for our region, and the City of Seattle has demonstrated substantial leadership in its management of its dams and riparian zones in the Cascades. It is important that the City demonstrate comparable leadership in its management of waters within the City, which still support salmon runs and provide valuable rearing habitats you young salmon. The Urban Blueprint is an excellent platform on which to base the City's future efforts to improve salmon habitat. By continuing to involve scientists from the University of Washington and other organizations involved in research on salmon, as happened in the recent workshop, the City can make effective use of its research and management resources and continue to be a leader in demonstrating how an urban area can support valuable natural resources.

I am not a fisheries biologist, but I directed the University of Washington's Institute for Environmental Studies for 11 years. In addition, I have for many years been active in the science-policy interface at a national level. I currently chair the Board on Environmental Studies and Toxicology of the National Research Council (the working arm of the National Academy of Sciences), which has carried out a number of studies on fish management issues. One of these was an analysis of the causes of declines of salmon runs in the Pacific Northwest and how these runs may be restored. Thus, I have a basis for evaluating and being excited about the efforts that the City of Seattle is undertaking to enhance its salmon resources.

I urge you continue to support the important work of City of Seattle scientists and to allocate the resources necessary to allow the promising start embodied in the Urban Blueprint to reach a satisfactory fruition.

Sincerely yours,

A handwritten signature in cursive script that reads "Gordon H. Orians".

Gordon H. Orians
Professor Emeritus of Zoology

cc: Chuck Clarke
Gary Zarker
Margaret Pageler

December 6, 2001

Sarah McKearnan
Seattle Public Utilities
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Dear Ms. McKearnan

The Seattle Audubon Society Conservation Committee is pleased to submit comments on "Seattle's Urban Blueprint for Habitat Protection and Restoration" which addressed issues relating to the recovery of chinook salmon and bull trout listed under the Endangered Species Act in our regional waters. Seattle Audubon is committed to the preservation of urban wildlife habitat including salmon in local streams, Lake Washington, the Duwamish, the Ship Canal and Locks and in the nearshore.

While we focus mostly upon wildlife, we recognize that healthy fish populations require many of the same regulatory protections, habitat protection and restoration, and management strategies as wildlife. Seattle Audubon is committed not only to the recovery of wild salmon, but also commercially viable populations. We recognize that this is a monumental task to recover salmon in such an urban landscape, and one that many do not think worthwhile. We do think it is worthwhile, because we believe that a healthy habitat in our own backyard is essential for a good quality of life, an understanding of the sharing of the planet with other organisms, and a way to monitor how well we are achieving that goal.

The task of recovering salmon is no less important than attempting to reverse the almost complete takeover of Seattle Parks and open space by invasive non-native plant species that impact wildlife populations, and also reduce food for salmon in riparian and nearshore habitats. Seattle Audubon is pleased to see many projects proposed that improve riparian and marine nearshore habitats, as these habitats are important for many of our nesting birds and migratory species. Through its restoration program at Promontory Point at Magnuson Park and the Gardening For Life Program, SAS has also begun to address ways to recover wildlife, including salmon, and we offer our organization as a partner to future projects. We applaud the City of Seattle in its new measures to conserve water, as that will be a major means to achieve greater flows out the Chittenden Locks in June and July. We recognize that even greater water conservation measures will probably be necessary in the future, and will push for education of our members to demonstrate that they are possible.

The majority of these comments were submitted by Donald Norman, a member of our Conservation Committee. If you would like further clarification of issues raised, please feel free to contact him at (206) 542-1275 or by e-mail at donorman@aol.com.

Sincerely,
Lauren Braden
Advocate for Wildlife Habitat
Seattle Audubon Society

Comments on Seattle's Urban Blueprint for Habitat Protection and Restoration

Prepared by: Seattle Audubon Society (SAS) Conservation Committee

Summary of Comments

SAS addresses its comments in the following areas:

- **Water Conservation.** Water conservation is the key to survival of salmonids in the region. A framework for integrating those plans with the well outlined water needs of salmonids using Seattle's waters is needed.
- **Pollution Controls.** Ongoing improvements in prevention of runoff will be more difficult with increasing density in Seattle. Following through on regulations mentioned and updates to the Seattle Shoreline Master Plan will require increased efforts by DCLU, SeaTrans, and the Water Department to ensure that plans do not exceed thresholds.
- **Exotic Species- Impacts on Salmon and Management Methods.** The management of Eurasian milfoil was not addressed in the SUB. Issues relating to the control of milfoil and phragmites in the Duwamish will require IPM plans that are not in place, and diligence to ensure that monitoring continues.
- **The Importance of Fish-eating Birds Upon Salmon Recovery.** There are thousands of salmon-eating birds in the Lake Washington and Duwamish river systems, and their impacts have not been addressed. Restoration activities need to address methods to reduce impacts to threatened salmon species.
- **Enhancement of Shorelines and Riparian Areas.** The importance of development of improved riparian and marine riparian habitat through the removal of exotic species and the planting of native species can not be stressed enough.

Water Conservation

While the Seattle's Urban Blueprint (SUB) addresses some very critical associations of water with reduced survival of fish, such as flows out of the Locks in summer, but it does not address how water will be available with the continued demand for water in the region. SAS supported the recent water conservation Initiative 63 that was accepted by the City Council. There must be some projections for water use and how that will impact water flows into Lake Washington, and the results of these measures need to be addressed so that it will be known whether additional measures will be needed to meet the water needs for fish. Can Seattle simply tighten its belt and achieve these goals, or, in drought summers like the most recent one, will there have to be rationing? With major salmon creeks like Issaquah Creek drying up as a warning, this issue must be addressed.

Pollution Controls

Impacts to water quality from runoff remains a serious problem in such an urban area as Seattle, and more information needs to be presented in the SUB. Some of the issues of concern include copper, and continued increases in phosphorus from overfertilization in yards. Seattle Audubon's Gardening for Life program is attempting to educate homeowners on these issues using simple messages that make sense, such as stop killing things in your yard, and plant more plants. To have a strong message also coming from the City's plan for salmon would add more weight to our messages. Enough is known about the water quality criteria for the protection of salmonids that goals for specific areas should be included in plan, and perhaps these goals should be used for deciding areas to receive more habitat restorations that include better buffers and removals of the problem pollutants. Much of this information is available, but would require some data analysis to determine the problem amounts, the solutions, and some timelines. Such goals need to be given to local neighborhoods so they know what they have to do to recover salmon. Otherwise, the pollution issue remains non-point and no-ones.

Exotic Species - Impacts on Salmon and Management Methods

While information was presented demonstrating that eurasian milfoil may have a detrimental effect on the foraging habitat of chinook salmon by eliminating habitat and reduce oxygen some areas in the littoral zone, no information was presented about the cover components of the milfoil, and how possible management methods might reduce or increase predation. Nothing was presented about the current status of IPM for milfoil, past historical problems with control, and how lake nutrient conditions impact the IPM plan.

Another species ignored in the document was Phragmites, which has completely dominated most of the upper portions of the SR99-509 1st Ave. S. bridge Washington Department of Transportation restoration site. Phragmites now occurs at the lower portion of that site, and also at an exit on west Marginal Way to the south, threatening the Hamm Creek restoration. Such exotic species domination of estuarine wetlands needs to be addressed, as it may reduce the

effectiveness of intertidal areas as foraging grounds for outmigrating salmon, for which there is limited habitat in the Duwamish.

The Importance of Fish-eating Birds Upon Salmon Recovery

A recent survey of great blue herons found over 250 pairs of herons nesting in King County, the majority of them associated with salmon runs. At the peak of the breeding season, over 1000 herons are feeding on the outmigrating salmonids. In addition, there are thousands of piscivorous birds that winter on Lake Washington, and though most are associated with the north and south parts of the Lake, outside Seattle. The foraging sites of the two heron colonies in Seattle, at North Beach and Kiwanis Ravine, are not well known. Also, several roosts of double-crested cormorants have been observed along the Fremont cut, and what impact these birds have is not known. Of particular concern is the night feeding of herons in Lake Washington when chinook are foraging. No studies of food habits of fish-eating birds in the Lake Washington system have been undertaken to SAS's knowledge, and SAS would welcome the opportunity to help address this issue. SAS and People for Puget Sound have recently begun a series of bird surveys at restoration sites along the Duwamish, which also hosts many piscivorous birds that feed on salmonids. Little work has been done to determine whether there are any interactions between bird and fish predators in terms of planning refugia for fish to survive such predation, and the artificial situation in Lake Washington and the Duwamish offers several opportunities to address these issues.

Enhancement of Shorelines and Riparian Areas

The recent publication of management plans for many avian species of concern for the North Pacific Lowland Bird Conservation Region (BCR) of the North American Bird Conservation Initiative (NABCI) should be integrated into the planning for restoring wetlands, stream, and shorelines to provide the best combination of native vegetation producing insects that serve as salmon food, and also provide cover, foraging, and nesting habitat for many species of concern in the Pacific Northwest (Altman 2000). Excellent plans do exist in the California Riparian Plans.

Some important tasks include the planting of red alder along the Duwamish at many sites, such as Kellogg Island, that could provide overhanging shade, with successional planting of spruce or cedar to provide eventual longer-term riparian buffers.